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Search Results -

Terms	Documents
L21 and maltohydrolase	0

Database: US Patents Full-Text Database; US Pre-Grant Publication Full-Text Database; JPO Abstracts Database; EPO Abstracts Database; Derwent World Patents Index; IBM Technical Disclosure Bulletins

Search: L24

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Search History

DATE: Sunday, December 22, 2002 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=USPT,DWPI; PLUR=YES; OP=OR			
L24	L21 and maltohydrolase	0	L24
L23	L21 and amylase	0	L23
L22	L21 and amylase	0	L22
L21	9409144	13	L21
L20	L19 and amylase	0	L20
L19	9205259	6	L19
L18	9205259 and amylase	0	L18
L17	L10 and amylase	0	L17
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L16	L10 and amylase	0	L16
L15	alpha and glucan adj maltohydrolase	16	L15
DB=DWPI; PLUR=YES; OP=OR			
L14	alpha and glucan adj maltohydrolase	0	L14
L13	glucan adj maltohydrolase	0	L13
L12	L10 and maltohydrolase	0	L12
L11	L10 and beta-amylase	0	L11
L10	9428149	3	L10
DB=USPT; PLUR=YES; OP=OR			
L9	L8 and beta-amylase	2	L9
L8	5034323	125	L8
DB=USPT,PGPB,JPAB,EPAB,DWPI; PLUR=YES; OP=OR			
L7	5034323	186	L7
L6	beta-amylase.ab. and potato and DNA	1	L6
L5	beta-amylase.ab. and potato.ab. and DNA	0	L5
L4	beta-amylase.ab. and potato.ab. and cDNA	0	L4
L3	beta-amylase.ab. and potato.ab.	24	L3
L2	beta-amylase and potato.ab.	46	L2
L1	beta-amylase and potato	521	L1

END OF SEARCH HISTORY

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NEWS EXPRESS  October 14 CURRENT WINDOWS VERSION IS V6.01,
              CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),
              AND CURRENT DISCOVER FILE IS DATED 01 OCTOBER 2002
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=> s beta(w)amylase and potato
L1          950 BETA(W) AMYLASE AND POTATO

=> s l1 and DNA
L2           30 L1 AND DNA

=> s l1 and clone
L3           19 L1 AND CLONE

=> uplicate remove l3
UPLICATE IS NOT A RECOGNIZED COMMAND
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"HELP COMMANDS" at an arrow prompt (=>).

=> n
N IS NOT A RECOGNIZED COMMAND
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=> duplicate remove l3
DUPLICATE PREFERENCE IS 'AGRICOLA, BIOSIS, EMBASE, CAPLUS'
KEEP DUPLICATES FROM MORE THAN ONE FILE?  Y/(N):n
PROCESSING COMPLETED FOR L3
L4            9 DUPLICATE REMOVE L3 (10 DUPLICATES REMOVED)

=> d l4 1-9 ti

L4   ANSWER 1 OF 9  BIOSIS  COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE 1
TI   Downregulation of a chloroplast-targeted   ***beta***  -  ***amylase***
     leads to a starch-excess phenotype in leaves.

L4   ANSWER 2 OF 9  BIOSIS  COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI   Variability in sweetpotato flavor chemistry between production years and
     with storage duration.

L4   ANSWER 3 OF 9  BIOSIS  COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI   Mass selection and root yield of true seed populations in sweet
       ***potato***  .

L4   ANSWER 4 OF 9  BIOSIS  COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI   Sites of   ***beta***  -  ***amylase***   gene expression in sweet
       ***potato***   tuberous root: Immunohistochemistry and in situ
     hybridization studies.

L4   ANSWER 5 OF 9  AGRICOLA                              DUPLICATE 2
TI   PCR cloning and sequencing of the   ***beta***  -  ***amylase***   cDNA
     from barley.

L4   ANSWER 6 OF 9  CAPLUS  COPYRIGHT 2002 ACS
TI   Nucleotide sequence of a cDNA   ***clone***   encoding ubiquitous .
       ***beta***  .-  ***amylase***   in rye (Secale cereale L.)

L4   ANSWER 7 OF 9  AGRICOLA                              DUPLICATE 3
TI   A nuclear gene encoding   ***beta***  -  ***amylase***   of sweet
       ***potato***  .

L4   ANSWER 8 OF 9  CAPLUS  COPYRIGHT 2002 ACS
TI   Amylolytic activity in stored   ***potato***   tubers.  2.  The effect of
     low-temperature storage on the activities of .alpha.- and .  ***beta***
     .-  ***amylase***   and .alpha.-glucosidase in   ***potato***   tubers

L4   ANSWER 9 OF 9  AGRICOLA                              DUPLICATE 4
TI   Molecular cloning and expression in Escherichia coli of cDNA encoding the
     subunit of sweet   ***potato***     ***beta***  -  ***amylase***  .


=> d l4 1-9 ibib ab
```

L4 ANSWER 1 OF 9 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE 1
ACCESSION NUMBER: 2002:385228 BIOSIS
DOCUMENT NUMBER: PREV200200385228
TITLE: Downregulation of a chloroplast-targeted ***beta*** - ***amylase*** leads to a starch-excess phenotype in leaves.
AUTHOR(S): Scheidig, Andreas; Frohlich, Anja; Schulze, Silke; Lloyd, James R. (1); Kossmann, Jens
CORPORATE SOURCE: (1) Plant Biology and Biogeochemistry Department, Riso National Laboratory, DK-4000, Roskilde: james.richard.lloyd@risoe.dk Denmark
SOURCE: Plant Journal, (June, 2002) Vol. 30, No. 5, pp. 581-591. http://www.blackwell-science.com/cgilib/jnlpage.bin?Journal=TPJ&File=TPJ&Page=aims. print. ISSN: 0960-7412.
DOCUMENT TYPE: Article
LANGUAGE: English
AB A functional screen in Escherichia coli was established to identify ***potato*** genes coding for proteins involved in transitory starch degradation. One ***clone*** isolated had a sequence very similar to a recently described chloroplast-targeted ***beta*** - ***amylase*** of Arabidopsis. Expression of the gene in E. coli showed that the protein product was a functional ***beta*** - ***amylase*** that could degrade both starch granules and solubilized amylopectin, while import experiments demonstrated that the ***beta*** - ***amylase*** was imported and processed into pea chloroplasts. To study the function of the protein in transitory starch degradation, transgenic ***potato*** plants were generated where its activity was reduced using antisense techniques. Analysis of plants reduced in the presence of this ***beta*** - ***amylase*** isoform showed that their leaves had a starch-excess phenotype, indicating a defect in starch degradation. In addition, it was shown that the antisense plants degraded only 8-30% of their total starch, in comparison with 50% in the wild type, over the dark period. This is the first time that a physiological role for a ***beta*** - ***amylase*** in plants has been demonstrated.

L4 ANSWER 2 OF 9 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 2001:407461 BIOSIS
DOCUMENT NUMBER: PREV200100407461
TITLE: Variability in sweetpotato flavor chemistry between production years and with storage duration.
AUTHOR(S): Kays, Stanley J. (1); Wang, Yan (1)
CORPORATE SOURCE: (1) Dept. of Horticulture, The Univ. of Georgia, Athens, GA, 30602-7273 USA
SOURCE: Hortscience, (June, 2001) Vol. 36, No. 3, pp. 525-526. print.
Meeting Info.: 98th Annual International Conference of the American Society for Horticultural Science Sacramento, California, USA July 21-25, 2001
ISSN: 0018-5345.
DOCUMENT TYPE: Conference
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Four sweetpotato (lpomoea batatas (L.) Lam.) ***clones*** representing a diverse range in flavor types were analyzed for differences in flavor chemistry due to production year and postharvest storage duration. The

clones tested were GA90-156 (extremely low sugar content), GA90-16 (nonsweet with an aroma similar to white ***potato*** , Solanum tuberosum L.) and 2 conventional North American cultivars, 'Jewel' and 'Centennial'. Maltose content, an indication of starch content and hydrolysis potential in baked roots, was the least variable parameter across ***clones*** of the major sugars over 2 production years. Postharvest curing (7 days at 29degreeC, 95% RH) and storage duration (8 2 months at 15 degreeC, 85% RH) had a significant impact on flavor chemistry with significant quantitative variation in sugars and volatile aroma compounds in 'Jewel' and 'Centennial'. Most flavor components of GA90-156 and GA90-16 increased significantly during curing but were relatively stable during storage; neither ***clone*** produced significant maltose during baking. GA90-156 had extremely low levels of the major sugars before and during storage. Curing and storage for 2 months appeared to enhance the activity of ***beta*** - ***amylase*** , facilitating starch hydrolysis during baking and the formation of monosaccharides that act as precursors for critical volatile flavor components in 'Jewel' and 'Centennial'. Volatile aroma compounds derived from lipids, beta-carotene and terpenoids decreased with prolonged storage of 'Jewel' and 'Centennial' but did not appear to have a major qualitative impact on the flavor of the four ***clones*** . Based upon the relative low organic acid and high sugar contents of the roots, organic acids did not appear to contribute significantly to the cooked flavor of the ***clones*** tested.

L4 ANSWER 3 OF 9 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1998:362739 BIOSIS
DOCUMENT NUMBER: PREV199800362739
TITLE: Mass selection and root yield of true seed populations in sweet ***potato*** .
AUTHOR(S): Yoshida, Tomohiko (1)
CORPORATE SOURCE: (1) Fac. Agric., Kyushu Univ., Fukuoka 812-8581 Japan
SOURCE: Japanese Journal of Crop Science, (June, 1998) Vol. 67, No. 2, pp. 178-182.
ISSN: 0011-1848.
DOCUMENT TYPE: Article
LANGUAGE: Japanese
SUMMARY LANGUAGE: Japanese; English

AB One of the obstructions in sweet ***potato*** cultivation in temperate regions is root storage during winter for the production of vines for the next season. If a homogeneous high yielding true seed population could be developed, vine cuttings obtained from the true seed population could be transplanted in a field, thus eliminating the need for root storage. Mass selections of true seed populations were attempted to develop a high-yield and high-quality true seed population. Selection for root skin color, germination at low temperature, vine diameter and taproot diameter were effective, and a genetic gain was observed for these characteristics. Root yield obtained by transplanting vines grown from true seed population was 70 apprx 78% compared to conventionally cultured control. A ***beta*** - ***amylase*** null population, which can be used for staple food and industrial purposes, was developed. The yield of true seeds by open-pollinating among ***clones*** with open field flowering was 144 seeds per ml. True seed populations with good agronomic characteristics could be used as breeding materials including overseas germplasm exchange and for an emergency crop by harvesting a large amount of true seeds, which can be stored at room temperature for a long period.

L4 ANSWER 4 OF 9 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1997:419979 BIOSIS
DOCUMENT NUMBER: PREV199799719182
TITLE: Sites of ***beta*** - ***amylase*** gene expression in sweet ***potato*** tuberous root: Immunohistochemistry and in situ hybridization studies.
AUTHOR(S): Ling, Thai-Yen; Chou, Wen-Ling; Lee, Ping-Du; Su, Jong-Ching
CORPORATE SOURCE: Dep. Agric. Chem., National Taiwan Univ., Taipei 10764 Taiwan
SOURCE: FASEB Journal, (1997) Vol. 11, No. 9, pp. A978.
Meeting Info.: 17th International Congress of Biochemistry and Molecular Biology in conjunction with the Annual Meeting of the American Society for Biochemistry and Molecular Biology San Francisco, California, USA August 24-29, 1997
ISSN: 0892-6638.
DOCUMENT TYPE: Conference; Abstract
LANGUAGE: English

L4 ANSWER 5 OF 9 AGRICOLA DUPLICATE 2
ACCESSION NUMBER: 94:69210 AGRICOLA
DOCUMENT NUMBER: IND20416667
TITLE: PCR cloning and sequencing of the ***beta*** - ***amylase*** cDNA from barley.
AUTHOR(S): Yoshigi, N.; Okada, Y.; Sahara, H.; Koshino, S.
AVAILABILITY: DNAL (385 J822)
SOURCE: The Journal of biochemistry, Jan 1994. Vol. 115, No. 1. p. 47-51
Publisher: Tokyo : Japanese Biochemical Society.
CODEN: JOBIAO; ISSN: 0021-924X
NOTE: Includes references
PUB. COUNTRY: Japan
DOCUMENT TYPE: Article
FILE SEGMENT: Non-U.S. Imprint other than FAO
LANGUAGE: English
AB Polymerase chain reaction (PCR) amplification of mRNA from developing barley (cultivar Haruna two-rows) endosperm was used to ***clone*** and sequence full-length cDNA encoding ***beta*** - ***amylase*** . The ***beta*** - ***amylase*** cDNA was 1,775 bp in length. The ***beta*** - ***amylase*** was deduced to be composed of 535 amino acid residues and its molecular weight was calculated to be 59,610. Kreis et al. reported that the ***beta*** - ***amylase*** cDNA from barley (cultivar Hiproly) was 1,754 bp in length and coded for a polypeptide of 535 amino acids [Eur. J. Biochem. (1987) 169,517- 525]. A comparison of the 3-amylase sequences from Haruna two-rows and Hiproly barleys revealed nine differences in the nucleotide sequence which resulted in three changes in the amino acid residues and 21 additional nucleotides at its 3'-end in the cultivar Haruna two-rows. The three changes were as follows: Ala-233, Ser-347, Met-527 (Haruna two-rows) and Val-233, Met-347, Ile-527 (Hiproly). Lundgard and Svensson pointed out that 23 amino acid residues of the peptide fragment derived from the COOH-terminal region of barley (cultivar Gula) ***beta*** - ***amylase*** were in agreement with the deduced amino acid sequence reported by Kreis et al., with the exception of a single position (Met-527 compared to Ile) [Carlsberg Res. Commun. (1986) 51, 487-491]. Our findings described above showed Met-527

is reasonable. In the cases of 6-amylases from soybean and sweet ***potato*** , the positions that corresponded to those at 233 and 347 in the amino acid sequence of ***beta*** - ***amylase*** from barley were Ala and Ser, respectively. Therefore, Ala-233 and Ser-347 in the amino acid sequence of barley ***beta*** - ***amylase*** were thought to be reasonable. Sequence homology of barley ***beta*** - ***amylase*** with the enzymes from soybean and sweet ***potato*** amounted to 66.7 and 59.2%, respectively.

L4 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1994:26272 CAPLUS
DOCUMENT NUMBER: 120:26272
TITLE: Nucleotide sequence of a cDNA ***clone*** encoding ubiquitous . ***beta*** .- ***amylase*** in rye (Secale cereale L.)
AUTHOR(S): Sadowski, Jan; Rorat, Tadeusz; Cooke, Richard; Delseny, Michel
CORPORATE SOURCE: Inst. Plant Genet., Pol. Acad. Sci., Poznan, 60-479, Pol.
SOURCE: Plant Physiology (1993), 102(1), 315-16
CODEN: PLPHAY; ISSN: 0032-0889
DOCUMENT TYPE: Journal
LANGUAGE: English
AB This report presents the sequence of a full-length cDNA encoding the ubiquitous . ***beta*** .- ***amylase*** of rye, which is the first published for monocotyledonous plants. It contains 1879 bp and a single open reading frame encoding a polypeptide of 503 amino acids. The mol. mass of the polypeptide estd. from the deduced amino acid sequence is 56,700 D. Comparison with other . ***beta*** .- ***amylase*** sequences shows 77% homol. with the partial rye endosperm-specific . ***beta*** .- ***amylase*** , 81% with the endosperm-specific form from barley, 72% with that of soybean, 63% with that of Arabidopsis thaliana leaves, and 62% with that of sweet ***potato*** tuber. It has recently been shown that ubiquitous . ***beta*** .- ***amylase*** (no C-terminal repeat region) of wheat and rye does undergo limited proteolysis involved in conversion to the latent form during seed germination. It is probable that ubiquitous and endosperm-specific . ***beta*** .- ***amylases*** play different physiol. roles during seed development and germination.

L4 ANSWER 7 OF 9 AGRICOLA DUPLICATE 3
ACCESSION NUMBER: 93:5765 AGRICOLA
DOCUMENT NUMBER: IND92075489
TITLE: A nuclear gene encoding ***beta*** - ***amylase*** of sweet ***potato*** .
AUTHOR(S): Yoshida, N.; Hayashi, K.; Nakamura, K.
CORPORATE SOURCE: Nagoya University, Nagoya, Japan
AVAILABILITY: DNAL (QH442.A1G4)
SOURCE: Gene, 1992. Vol. 120, No. 2. p. 255-259
Publisher: Amsterdam : Elsevier Science Publishers.
CODEN: GENED6; ISSN: 0378-1119
NOTE: Includes references.
DOCUMENT TYPE: Article
FILE SEGMENT: Non-U.S. Imprint other than FAO

LANGUAGE: English

AB A nuclear AmyB gene from sweet ***potato*** encoding ***beta*** - ***amylase*** (beta Amy) that is abundant in tuberous roots and inducible in other organs by an exogenous supply of sucrose or polygalacturonic acid, was isolated and characterized. Genomic Southern blot hybridization, restriction maps of independently isolated phage A genomic ***clones*** , and the nucleotide sequence of AmyB compared with that of the cDNA, all suggested that beta Amy of sweet ***potato*** is encoded by a gene that is present in a single copy per haploid genome. In the sequence of AmyB, the sequence that is identical to that of the cDNA was split into seven exons by six introns. and the transcription of this gene starts from multiple sites 26 to 30 bp downstream from a potential TATA-box sequence, 5'-TATATAA. In the 5'-upstream region of AmyB, there are sequences homologous to those conserved in the 5'-upstream regions of genes encoding sporamin, which are regulated similarly to AmyB. The 5'-upstream region of AmyB also contains sequences to which several previously known plant nuclear factors bind.

L4 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1992:425001 CAPLUS
DOCUMENT NUMBER: 117:25001
TITLE: Amylolytic activity in stored ***potato*** tubers. 2. The effect of low-temperature storage on the activities of .alpha.- and . ***beta*** .- ***amylase*** and .alpha.-glucosidase in ***potato*** tubers
AUTHOR(S): Cochrane, M. Patricia; Duffus, Carol M.; Allison, M. J.; Mackay, G. R.
CORPORATE SOURCE: Edinburgh Sch. Agric., Edinburgh, EH9 3JG, UK
SOURCE: Potato Research (1991), 34(4), 333-41
CODEN: PORHBW; ISSN: 0014-3065
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Tubers of the ***potato*** cultivars Record, Wilja, Pentland Dell and Brodick (formerly ***clone*** 137371) were sampled before and after storage at either 4.degree. or 10.degree.. Reducing sugar content stayed const. during storage at 10.degree. in all four cultivars but rose greatly during the first 6-12 wk of storage at 4.degree. in Record, Wilja and Pentland Dell but not in Brodick. Amylolytic activity was detd. after 5 wk storage using blocked p-nitrophenyl maltoheptaoside as substrate for .alpha.-amylase, p-nitrophenyl maltopentaoside as substrate for . ***beta*** .- ***amylase*** , and p-nitrophenylglucopyranoside as substrate for .alpha.-glucosidase. The values obtained from tubers stored at 4.degree. were higher than those from tubers stored at 10.degree., the differences being much less in Brodick than in the other three cultivars.

L4 ANSWER 9 OF 9 AGRICOLA DUPLICATE 4
ACCESSION NUMBER: 92:52804 AGRICOLA
DOCUMENT NUMBER: IND92027835
TITLE: Molecular cloning and expression in Escherichia coli of cDNA encoding the subunit of sweet ***potato*** ***beta*** - ***amylase*** .
AUTHOR(S): Yoshida, N.; Nakamaura, K.
CORPORATE SOURCE: Mitsui Petrochemical Industries, Ltd., Waki-cho, Kuga-gun, Yamaguchi
AVAILABILITY: DNAL (385 J822)
SOURCE: Journal of biochemistry, Aug 1991. Vol. 110, No. 2. p.

196-201
Publisher: Tokyo : Japanese Biochemical Society.
CODEN: JOBIAO; ISSN: 0021-924X
NOTE: Includes references.
DOCUMENT TYPE: Article
FILE SEGMENT: Non-U.S. Imprint other than FAO
LANGUAGE: English

AB Tuberous roots of the sweet ***potato*** are unusually rich in ***beta*** - ***amylase*** , and the ***beta*** - ***amylase*** polypeptides account for about 5% of the total soluble protein of the organ. Unlike ***beta*** - ***amylases*** from other origins, the sweet ***potato*** ***beta*** - ***amylase*** is a tetramer of identical subunits, and it also bears starch phosphorylase-inhibitor activity. A cDNA for the subunit of sweet ***potato*** ***beta*** - ***amylase*** was obtained by immunological screening of an expression cDNA library constructed by the vector-primer and linker method using a plasmid vector containing tac-SP6 promoters. The SP6 transcript of a 2,000 base-pair-long cDNA insert directed the synthesis in vitro of a precursor to the subunit of ***beta*** - ***amylase*** which was identical in size with the mature subunit, and the ***beta*** - ***amylase*** mRNA detected by Northern blot hybridization was identical in size with the SP6 transcript of the cDNA insert. The cDNA insert contained 1,494 base pairs of an open reading frame which codes for the 499-amino-acid-long precursor to the subunit of ***beta*** - ***amylase*** . An amino acid sequence identical to the N-terminal amino acid sequence of the mature subunit appeared immediately after the initiator methionine of the precursor, indicating that the subunit of ***beta*** - ***amylase*** is synthesized as a mature form. Comparison of the amino acid sequences of subunits of sweet ***potato*** ***beta*** - ***amylase*** and seed ***beta*** - ***amylases*** from barley and soybean indicated that these enzymes share about 68% amino acid identities among each other. Escherichia coli cells harboring the cDNA ***clone*** produced the mature-sized subunit of the ***beta*** - ***amylase*** , and the soluble extract exhibited amylolytic activity which migrated to the same position as the ***beta*** - ***amylase*** purified from the sweet ***potato*** in non-denaturing polyacrylamide gel containing soluble starch indicating that oligomerization of the subunit occurred properly in E. coli cells.

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KEEP DUPLICATES FROM MORE THAN ONE FILE?  Y/(N):y
ENTER FILE NAMES OF DUPLICATES TO KEEP:n
'N' IS NOT VALID.  VALID FILE NAMES ARE 'AGRICOLA, BIOSIS, EMBASE, CAPLUS'
You have entered a file name of duplicates to keep that is not
referenced by any of the L#s specified for this DUPLICATE command.
The file names of duplicates that can be kept are listed above.
Please enter one of these file names.
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The file names of duplicates that can be kept are listed above.
Please enter one of these file names.
ENTER FILE NAMES OF DUPLICATES TO KEEP:
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ENTER FILE NAMES OF DUPLICATES TO KEEP:agricola
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L5 18 DUPLICATE REMOVE L2 AGRICOLA (12 DUPLICATES REMOVED)

=> s l5 and transform?
L6 3 L5 AND TRANSFORM?

=> d l6 1-3 ibib ab

L6 ANSWER 1 OF 3 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1997:419979 BIOSIS
DOCUMENT NUMBER: PREV199799719182
TITLE: Sites of ***beta*** - ***amylase*** gene expression in sweet ***potato*** tuberous root: Immunohistochemistry and in situ hybridization studies.
AUTHOR(S): Ling, Thai-Yen; Chou, Wen-Ling; Lee, Ping-Du; Su, Jong-Ching
CORPORATE SOURCE: Dep. Agric. Chem., National Taiwan Univ., Taipei 10764 Taiwan
SOURCE: FASEB Journal, (1997) Vol. 11, No. 9, pp. A978.
Meeting Info.: 17th International Congress of Biochemistry and Molecular Biology in conjunction with the Annual Meeting of the American Society for Biochemistry and Molecular Biology San Francisco, California, USA August 24-29, 1997
ISSN: 0892-6638.
DOCUMENT TYPE: Conference; Abstract
LANGUAGE: English

L6 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:145000 CAPLUS
DOCUMENT NUMBER: 132:190524
TITLE: A novel plastid-targeting nucleic acid sequence, a novel . ***beta*** .- ***amylase*** sequence, and a stimulus-responsive promoter from Arabidopsis thaliana
INVENTOR(S): Kavanagh, Thomas Anthony; Lao, Nga Thi
PATENT ASSIGNEE(S): Advanced Technologies (Cambridge) Limited, UK
SOURCE: PCT Int. Appl., 74 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000011144	A2	20000302	WO 1999-GB2697	19990813
WO 2000011144	A3	20000908		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

CA 2336249	AA	20000302	CA 1999-2336249	19990813
AU 9954326	A1	20000314	AU 1999-54326	19990813
EP 1105468	A2	20010613	EP 1999-940330	19990813
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BR 9914299	A	20011127	BR 1999-14299	19990813
JP 2002523040	T2	20020730	JP 2000-566401	19990813
US 6489540	B1	20021203	US 1999-375140	19990816
PRIORITY APPLN. INFO.:			GB 1998-17959 A	19980819
			GB 1998-17963 A	19980819
			GB 1999-13014 A	19990605
			WO 1999-GB2697 W	19990813

AB The invention provides a novel chloroplast-targeted novel . ***beta*** .- ***amylase*** sequence (ct . ***beta*** .- ***amylase***), a novel chloroplast targeting nucleic acid sequence, and a novel . ***beta*** .- ***amylase*** -encoding nucleic acid sequence from Arabidopsis thaliana. There is also disclosed an inducible promoter which is independently stimulated by light or sugar stimulus. Methods of ***transforming*** plants using these sequences are described, as well as ***transformed*** plant cells, ***transformed*** plants and seed thereof, as well as chimeric genes contg. the sequences. Modification of starch levels in plants can be achieved, as well as the targeting of genes from the starch biosynthetic or degradative pathways, disease or pest resistance or variation of gene expression due to stimulus are described.

L6 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:	1999:753351 CAPLUS
DOCUMENT NUMBER:	132:946
TITLE:	Transgene identification in transgenic seeds using screenable markers linked to aleurone-specific promoters
INVENTOR(S):	Kriz, Alan L.; Spencer, T. Michael
PATENT ASSIGNEE(S):	Dekalb Genetics Corporation, USA
SOURCE:	PCT Int. Appl., 177 pp. CODEN: PIXXD2
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9960129	A1	19991125	WO 1999-US11023	19990518
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6307123	B1	20011023	US 1998-80625	19980518
AU 9939053	A1	19991206	AU 1999-39053	19990518
US 6433252	B1	20020813	US 2000-695782	20001024
PRIORITY APPLN. INFO.:			US 1998-80625 A2	19980518

WO 1999-US11023 W 19990518

AB The present invention provides methods and compns. for the identification of transgenic seeds. This is accomplished by use of screenable markers linked to aleurone-specific promoters. In particular embodiments of the invention, the screenable marker gene is selected from the group consisting of a green fluorescent protein gene, a luciferase gene, and an R gene; the selectable marker gene comprises a gene selected from the group consisting of neomycin phosphotransferase II, bar, EPSPS, anthranilate synthase, and dalapon dehalogenase; and the aleurone-specific promoter comprises the L3 oleosin promoter. The screenable markers can be provided as gene fusions with selectable markers, allowing both selection and screening of ***transformants*** . The use of aleurone-specific promoters, which also direct expression in embryogenic tissues, allows efficient selection of transgenic cells and the screening of viable transgenic seeds, while avoiding the deleterious effects assocd. with constitutive expression of screenable marker genes. Screening of transgenic seeds avoids the need for growing and assaying of seeds for transgenes and allows implementation of automated seed screening techniques fo the identification of transgenic seeds.

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> FIL STNGUIDE

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	48.15	48.36

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-2.48	-2.48

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FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Dec 20, 2002 (20021220/UP).

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=> LOG Y

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FULL ESTIMATED COST	1.86	50.22

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL

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 NEWS EXPRESS  October 14 CURRENT WINDOWS VERSION IS V6.01,
               CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),
               AND CURRENT DISCOVER FILE IS DATED 01 OCTOBER 2002
 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
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 NEWS PHONE    Direct Dial and Telecommunication Network Access to STN
 NEWS WWW      CAS World Wide Web Site (general information)

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FILE 'HOME' ENTERED AT 15:11:31 ON 22 DEC 2002

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                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     0.21       0.21

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FILE 'BIOSIS' ENTERED AT 15:11:46 ON 22 DEC 2002
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L1            7 GLUCOSIDASE AND PLANT AND POTATO AND TRANSFORM?

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DUPLICATE PREFERENCE IS 'EMBASE, CAPLUS'
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PROCESSING COMPLETED FOR L1
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L2   ANSWER 1 OF 7  CAPLUS  COPYRIGHT 2002 ACS
AN   2002:408816  CAPLUS
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DN 136:397057
TI Phosphoribosylformylglycinamidine synthase and other soybean genes up-regulated during nematode infection and their use in preparing ***transformed*** nematode-resistant ***plants***
IN MacKenzie, Sally A.; Baghchhipawala, Zarir; Bassuner, Ronald
PA The Board of Regents of the University of Nebraska, USA
SO PCT Int. Appl., 94 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002042478	A2	20020530	WO 2001-US44054	20011120
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	AU 2002039333	A5	20020603	AU 2002-39333	20011120
PRAI	US 2000-252214P	P	20001121		
	WO 2001-US44054	W	20011120		

L2 ANSWER 2 OF 7 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
AN 2001193245 EMBASE
TI Sense- and antisense-mediated gene silencing in tobacco is inhibited by the same viral suppressors and is associated with accumulation of small RNAs.
AU Di Serio F.; Schob H.; Iglesias A.; Tarina C.; Bouldoires E.; Meins F. Jr.
CS F. Meins Jr., Friedrich Miescher Institute, Novartis Research Foundation, Maulbeerstrasse 66, CH-4058 Basel, Switzerland. meins@fmi.ch
SO Proceedings of the National Academy of Sciences of the United States of America, (22 May 2001) 98/11 (6506-6510).
Refs: 46
ISSN: 0027-8424 CODEN: PNASA6
CY United States
DT Journal; Article
FS 029 Clinical Biochemistry
LA English
SL English

L2 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2002 ACS
AN 2001:422799 CAPLUS
DN 135:208164
TI Copy-DNA cloning and characterization of a ***potato*** .alpha.-***glucosidase*** : expression in Escherichia coli and effects of down-regulation in transgenic ***potato***
AU Taylor, Mark A.; Ross, Heather A.; McRae, Diane; Wright, Frank; Viola, Roberto; Davies, Howard V.
CS Unit of Plant Biochemistry, Scottish Crop Research Institute, Dundee, Invergowrie, DD2 5DA, UK
SO Planta (2001), 213(2), 258-264
CODEN: PLANAB; ISSN: 0032-0935

PB Springer-Verlag
DT Journal
LA English
RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2002 ACS
AN 2000:145000 CAPLUS
DN 132:190524
TI A novel plastid-targeting nucleic acid sequence, a novel .beta.-amylase sequence, and a stimulus-responsive promoter from Arabidopsis thaliana
IN Kavanagh, Thomas Anthony; Lao, Nga Thi
PA Advanced Technologies (Cambridge) Limited, UK
SO PCT Int. Appl., 74 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000011144	A2	20000302	WO 1999-GB2697	19990813
	WO 2000011144	A3	20000908		
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	AU 9954326	A1	20000314	AU 1999-54326	19990813
	EP 1105468	A2	20010613	EP 1999-940330	19990813
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	BR 9914299	A	20011127	BR 1999-14299	19990813
	JP 2002523040	T2	20020730	JP 2000-566401	19990813
	US 6489540	B1	20021203	US 1999-375140	19990816
PRAI	GB 1998-17959	A	19980819		
	GB 1998-17963	A	19980819		
	GB 1999-13014	A	19990605		
	WO 1999-GB2697	W	19990813		

L2 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2002 ACS
AN 1999:753351 CAPLUS
DN 132:946
TI Transgene identification in transgenic seeds using screenable markers linked to aleurone-specific promoters
IN Kriz, Alan L.; Spencer, T. Michael
PA Dekalb Genetics Corporation, USA
SO PCT Int. Appl., 177 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI WO 9960129 A1 19991125 WO 1999-US11023 19990518
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
US 6307123 B1 20011023 US 1998-80625 19980518
AU 9939053 A1 19991206 AU 1999-39053 19990518
US 6433252 B1 20020813 US 2000-695782 20001024
PRAI US 1998-80625 A2 19980518
WO 1999-US11023 W 19990518
RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2002 ACS
AN 1997:532524 CAPLUS
DN 127:145926
TI ***Potato*** .alpha.- ***glucosidase*** cDNA sequence, antisense sequences, recombinant enzyme, and genetic engineering ***plants*** with modified starch breakdown
IN Taylor, Mark Andrew; Davies, Howard Vivian
PA Nickerson Biocem Limited, UK; Taylor, Mark Andrew; Davies, Howard Vivian
SO PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9724448	A1	19970710	WO 1996-GB3239	19961224
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AU 9712044	A1	19970728	AU 1997-12044	19961224
PRAI GB 1995-26613		19951228		
WO 1996-GB3239		19961224		

L2 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2002 ACS
AN 1997:390695 CAPLUS
DN 127:1647
TI Glucan production by ***plants*** modulation by maltooligosaccharides, ***plant*** granule-bound starch synthase I in glucan production, and genetic engineering to regulate maltooligosaccharide content
IN Smith, Alison Mary; Denyer, Kay
PA John Innes Centre Innovations Limited, UK; Smith, Alison Mary; Denyer, Kay
SO PCT Int. Appl., 85 pp.
CODEN: PIXXD2
DT Patent

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LA   English
FAN.CNT 1
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     AU 9673239          A1    19970522       AU 1996-73239     19961104
     AU 720418           B2    20000601
     EP 871744           A1    19981021       EP 1996-935165    19961104
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     JP 11514521         T2    19991214       JP 1997-517171    19961104
PRAI GB 1995-22589       A     19951103
     WO 1996-GB2696      W     19961104


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=> s l2 and amylase
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=> s l2 and amylase
L3            3 L2 AND AMYLASE

=> d l3 1-3

L3   ANSWER 1 OF 3  CAPLUS  COPYRIGHT 2002 ACS
AN   2000:145000  CAPLUS
DN   132:190524
TI   A novel plastid-targeting nucleic acid sequence, a novel .beta.-
       ***amylase***   sequence, and a stimulus-responsive promoter from
     Arabidopsis thaliana
IN   Kavanagh, Thomas Anthony; Lao, Nga Thi
PA   Advanced Technologies (Cambridge) Limited, UK
SO   PCT Int. Appl., 74 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
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     WO 2000011144      A3    20000908
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     AU 9954326         A1    20000314       AU 1999-54326    19990813
     EP 1105468         A2    20010613       EP 1999-940330   19990813
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     US 6489540         B1    20021203       US 1999-375140   19990816
PRAI GB 1998-17959      A     19980819
     GB 1998-17963      A     19980819
     GB 1999-13014      A     19990605
     WO 1999-GB2697     W     19990813

L3   ANSWER 2 OF 3  CAPLUS  COPYRIGHT 2002 ACS
AN   1999:753351  CAPLUS
DN   132:946
TI   Transgene identification in transgenic seeds using screenable markers
     linked to aleurone-specific promoters
IN   Kriz, Alan L.; Spencer, T. Michael
PA   Dekalb Genetics Corporation, USA
SO   PCT Int. Appl., 177 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.         KIND  DATE           APPLICATION NO.  DATE
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             CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     US 6307123          B1   20011023       US 1998-80625    19980518
     AU 9939053          A1   19991206       AU 1999-39053    19990518
     US 6433252          B1   20020813       US 2000-695782   20001024
PRAI US 1998-80625       A2   19980518
     WO 1999-US11023     W    19990518
RE.CNT  8      THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3   ANSWER 3 OF 3  CAPLUS  COPYRIGHT 2002 ACS
AN   1997:390695  CAPLUS
DN   127:1647
TI   Glucan production by  ***plants***  modulation by maltooligosaccharides,
       ***plant***  granule-bound starch synthase I in glucan production, and
     genetic engineering to regulate maltooligosaccharide content
IN   Smith, Alison Mary; Denyer, Kay
PA   John Innes Centre Innovations Limited, UK; Smith, Alison Mary; Denyer, Kay
SO   PCT Int. Appl., 85 pp.
     CODEN: PIXXD2
DT   Patent
LA   English
FAN.CNT 1
     PATENT NO.          KIND  DATE           APPLICATION NO.  DATE
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PI   WO 9716554          A1   19970509       WO 1996-GB2696   19961104
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             LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT,
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             IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG
     AU 9673239          A1   19970522       AU 1996-73239    19961104
     AU 720418           B2   20000601
     EP 871744           A1   19981021       EP 1996-935165   19961104
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI
     JP 11514521         T2   19991214       JP 1997-517171   19961104
PRAI GB 1995-22589       A    19951103
     WO 1996-GB2696      W    19961104


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FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Dec 20, 2002 (20021220/UP).

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YOU HAVE REQUESTED DATA FROM FILE 'CAPLUS' - CONTINUE? (Y)/N:y

L3 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2002 ACS
AB The prodn. of .alpha.-glucan (e.g. starch) by ***plant*** cells is modulated by maltooligosaccharide content in the cells. The ***plant*** granule bound starch synthase I (GBSSI) activity is regulated by maltooligosaccharides thus modulating the prodn. of unbranched .alpha.-glucan, such as amylose, and branched .alpha.-glucan, such as amylopectin. Maltooligosaccharide content of cells can be regulated by ***transforming*** ***plant*** cells with microbial .alpha.-***glucosidase*** genes for example. ***Potato*** or pea ***plant*** glucan content can thus be genetically engineered.

=>

---Logging off of STN---

=>
Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	1.62	34.39
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
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STN INTERNATIONAL LOGOFF AT 15:44:01 ON 22 DEC 2002